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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,620	09/16/2003	Syamal K. Ghosh	86897RLO	3531

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EXAMINER	
BECK, DAVID THOMAS	

ART UNIT	PAPER NUMBER
1732	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/663,620	GHOSH ET AL.	
	Examiner	Art Unit	
	David T. Beck	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Yukinobu et al (6,511,614).

With regard to claim 1, Yukinobu et al teach a method for forming homogeneous mixture of powders of organic materials including at least one dopant component and one host component to provide a homogeneous mixture for forming a pellet for thermal physical vapor deposition producing an organic layer on a substrate for use in an organic light-emitting device (column 1, lines 20-30), comprising: a) combining organic materials, such materials including at least one dopant component and one host component (column 3, lines 1-10); b) providing a liquid to emulsify the organic materials; c) mixing the emulsified organic materials in a container to form a homogeneous mixture of organic material (column 3, lines 28-40); d) heating the organic materials in a container until the liquid is evaporated and a solidified homogeneous mixture of organic materials remain (abstract); e) removing the solidified homogeneous mixture of organic

materials from the container; f) pulverizing the solidified mixture of organic materials into a homogeneous mixture of organic powder (column 10, lines 45-54); and g) compacting the homogenous mixture of organic powder, to form a pellet suitable for thermal physical vaporization to produce an organic layer on a substrate for use in an organic light-emitting device (column 11, lines 15-37).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yukinobu et al (6,511,614).

With regard to claim 2, Yukinobu et al teach that the amount of dopant component varies between 10 to 50% (column 12, lines 30-34) which overlaps applicant's claimed range of 0.1 and 20% by weight of the total weight of the mixture. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yukinobu et al (6,511,614) in view of Chaklader (2002/0048548).

With regard to claim 3, Yukinobu et al teach the invention of claim 1, but do not expressly disclose pelletizing the powder at a range of pressures between 3,000 and

20,000 pounds per square inch. Chaklader teaches pelletizing the powder at a range of pressures between 3,000 and 20,000 pounds per square inch. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to pelletize the powder at a range of pressures between 3,000 and 20,000 pounds per square inch. The motivation to do so would have been to form a pellet of the desired density.

6. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukinobu et al (6,511,614) in view of Saegusa (5,840,267).

With regard to claims 4 and 5, Yukinobu et al teach the invention of claim 1, but do not explicitly teach that the container is formed from glass or metal. Saegusa teaches mixing powder in a metal/platinum container (column 10, lines 39-41). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to mix the powder in the process of Yukinobu et al in a platinum container. The motivation to do so would have been to avoid a reaction with the container.

With regard to claim 6, Yukinobu et al teach the invention of claim 1, but do not explicitly teach that the mixing includes using a ball mill, high-speed propeller, turbine blade or ultrasonication. Saegusa teaches the solution is mixed using an ultrasonic horn. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to mix the powder in the process of Yukinobu et al with an ultrasonic horn. The motivation to do so would have been to insure complete mixing.

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukinobu et al (6,511,614) in view of Tsubota et al (5,840,267).

With regard to claims 6 and 7, Yukinobu et al teach the invention of claim 1, but do not explicitly teach that the mixing includes using an ultrasonic horn at 10-30 kHz. Tsubota et al teach that the solution is mixed using an ultrasonic horn at 29 kHz. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to mix the powder in the process of Yukinobu et al with an ultrasonic horn at 29 kHz. The motivation to do so would have been to insure complete mixing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Beck whose telephone number is 571-272-2942. The examiner can normally be reached on Monday - Friday, 8AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 517-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DTB
July 29, 2005
DTB

MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER